PHYSICS 7E ONLINE
Course Syllabus

Course Summary: This is the 3rd course in UCI’s introductory sequence on classical physics, in which rigorous and quantitative mathematical modeling is used to explain and predict physical phenomena. This introductory series helps students develop a physical understanding of their surroundings and of the technologies found in everyday life. In this course, students study the behavior of fluids, waves, sound, and light.

Course Objectives: At the conclusion of this course, students will be able to demonstrate:

- a knowledge of fundamental laws governing oscillations and periodic motion
- a descriptive, conceptual understanding of physical phenomena including sound and light
- mathematical competency describing these physical phenomena quantitatively
- the ability to analyze and solve numeric problems, including the selection of appropriate mathematical formulae and techniques
- the ability to make quantitative models and descriptive predictions of physical behavior

Class Meetings: The course offered during Summer Session is a fully ONLINE class. We do NOT meet regularly on campus for lecture. Instead, registered students gain access to a complete online course portal that contains all course materials, instructions, and assignments. The course portal will open for student access the week before Week 1. We will meet in person only for the Final Exam on Wednesday evening, Sept 7.

Class Pacing: Summer Session courses are intensive, 5-week courses covering the same material as UCI’s traditional, 10-week courses. Completing this Physics course successfully will require dedication and focus! The recommended calendar on the accompanying page shows interested students the outline for this course. Study activities are scheduled 7 days per week, for a total of approximately 20 hours per week of work. Students are welcome to work ahead of the study schedule, especially since the ONLINE format does not require on-campus lectures. Before enrolling in this course, students should reserve substantial time in their daily schedules.

Pre-Requisites: Physics 7C and Math 2AB.

Co-Requisites: Physics 7E does not have a tutorial session or any other co-requisites. In Fall quarter, students benefit from the parallel laboratory course Physics 52A, which has complementary reading, lectures, and hands-on laboratory experiences.

Textbook: University Physics, 13th Edition, by Young and Freedman. This course will cover Chapters 12, 14-16, and 32-36. A special, paperpack edition containing only these chapters is available in the UCI bookstore. Alternately, students are welcome to purchase the eBook. Students may also use an older edition of University Physics if they are willing to be responsible for any discrepancies.

Other Requirements: This course uses MasteringPhysics for homework. Each student must maintain one MasteringPhysics account to earn credit for homework. Students will have their MasteringPhysics accounts upgraded to an updated MasteringPhysics platform to be compatible with the ONLINE course portal.

Course Instructors

Instructor: Prof. Philip G. Collins
Email: collinsp@uci.edu  Office: 310H RH  Office Hour: by appointment only during Summer Session

Teaching Assistant: TBA
Both instructors will be online throughout the course, monitoring and participating in the online course Forums. General questions regarding course policies, course implementation, and the physics content should all be directed to the discussion forum titled Q&A Forum on the course portal. Private questions by email are also welcome, but may only be handled as time allows.

Course Administration: ALL enrollment issues for UCI students are handled by the UCI Summer Session office.

Course Assignments

The following is a brief summary of the requirements in this course. Complete instructions will accompany all of the daily materials and weekly assignments at the online course portal.

Daily Assignments: Every day, students will complete a learning sequence consisting of three activities:

- **Readings:** Reading assignments for each day are outlined on the course calendar.
- **Lecture Podcasts:** Watching a recorded lecture with demonstrations and example problem solving for each topic.
- **Homework Problems:** Every new topic has homework problems to be completed along with your reading. Online Q&A forums accompany the problems and are monitored daily by the instructors.

Weekly Assessment: In addition to the daily assignments, the course includes:

- **Problem Solving Sessions:** An optional discussion section is held each Thursday evening. These sessions are held in an online environment, and they provide students with a chance to chat with an instructor about homeworks, work together online, and discuss and practice problem solving strategies.

- **Quizzes:** At the end of each week, students must complete a quiz on the material. Students may sign in to complete their quiz on either Sunday evening at 8:00 pm or Monday morning at 9:00 am. Each quiz is timed for 25 minutes.

Final Exam: The Final exam is a conventional, written exam given on campus from 5:00 to 7:00 pm on Wednesday, September 7. Students bring paper and pencil to campus and should leave computers (and all other electronics) at home. No scantron form is necessary. No makeup exams will be available. Students who cannot be in Irvine on September 9 will be required to arrange electronic proctoring using ProctorU on the same day and time as the in-class exam.

Course Grading

Grading Policy: Final letter grades for the course will be computed using the following weights:

- Completion of Daily Lectures 20%
- Completion of Daily Homework 20%
- Weekly Quizzes 20%
- Final Exam 40%

For updates, see the course website [https://eee.uci.edu/16z/47220/](https://eee.uci.edu/16z/47220/)
PHYSICS 7E ONLINE

Course Syllabus

Students with composite scores 85% or higher, or who are in the top 15% of the class overall, will receive grades of A- or better. However, note that the first three components are primarily designed to help students stay on track and to complete the required material. Final letter grades will depend enormously on performance on the Final Exam. This exam is the largest part of your grade because it is our only opportunity to guarantee against different forms of academic dishonesty that can occur in an online course.

Scores for individual assignments will be posted on EEE as they become available. It is your responsibility to ensure that your scores have been correctly recorded on EEE. If there are clerical errors in your recorded scores, please notify the instructor. No scores will be changed after the last day of classes.

Calculator Policy: On the Final Exam, students will be allowed to use a simple, non-programmable and non-graphing calculator. Programmable calculators will not be allowed. Department policy currently suggests any of the following calculator models as examples: TI-30Xa, TI-30XIIS, TI-34II, TI-36X Solar, Casio fx-300MSPLUS, Sharp EL531VB-BL, HP-9S, or HP-30S.

Cheating: Anyone caught cheating on any assignment will automatically fail this course. In addition, the appropriate deans will be notified, and this course will strictly enforce the UCI policies on academic honesty. Cheating includes giving or receiving assistance on any exam, or submitting work that is copied from another person’s work, and tampering with and/or re-submitting exams or homework. Cheating does not include discussing assignments with others or using outside reference materials to learn more. You are encouraged to work together, but any work turned in for a grade must be your own effort and not someone else’s words.

Additional Resources

Course Information: Throughout the quarter it may be necessary to give additional instructions or announcements. This information will be posted using Announcements from the course portal. Activate your UCnetID e-mail account and check it regularly.

Students with Disabilities: All University-recognized disabilities will be accommodated according to University policies.

Additional Help: For any questions not on the course FAQ, please contact the Instructor and/or the course TA via email.